

REMARKS

In the Office Action mailed September 20, 2005, the Examiner noted that claims 3-5 and 8-10 were pending, and rejected all claims. Claims 3-5 and 8-10 remain pending for reconsideration which is requested. No new matter has been added. The Examiner's rejections and objections are traversed below.

In the Office Action the Examiner rejected claim 4 under 35 U.S.C. section 112 paragraph 2 as indefinite. Claim 4 clearly states that the attenuator amount is set such that an abrupt signal does not destroy the transmitter and that such an abrupt signal can be detected. It is submitted that claim 4 is clear. If additional concerns with the claims arise, the Examiner is invited to telephone to resolve the same. Suggestions by the Examiner are also welcome. Withdrawal of the rejection is requested.

Page 3 of the Office Action rejects claims 4, 5, 9 and 10 under 35 U.S.C. § 103 over Ford and Minamimoto. Minamimoto issued on January 5, 2005 (after the filing date of the present application) based on a filing date of October 25, 2003. Under 35 USC 103(c) Minamimoto does not qualify as prior art because the subject matter and the claimed invention were, at the time the claimed invention was made, owned by the same company (Fujitsu Limited) or subject to an obligation of assignment to the same company (Fujitsu Limited). Withdrawal of the rejection is requested.

On page 2 of the Office Action, the Examiner rejected claims 3 and 8 under 35 U.S.C. § 102(e) as anticipated by Ford.

An Interview was conducted with the Examiner and the substance of the Interview is discussed below.

The Examiners attention to two issues is again requested. Ford is asserted by the Examiner as holding of an existing **signal** level when an add/drop occurs. The present claimed invention, as discussed with the Examiner, calls for setting an "**attenuation amount**" (not a signal level) to a predetermined value "when an optical signal component of a wavelength of the WDM optical signal is disconnected". In the Interview the Examiner asserted that the holding at an "existing" signal level when a drop/add occurs in Ford is equivalent to the "setting attenuation at a predetermined amount" of the claimed invention. Even if this were a correct characterization of what Ford does when a signal is dropped, it is submitted that setting an attenuation amount to a predetermined value (such as -10dB) is very different from holding at an existing level because the existing level in Ford is a continuously varying, signal tracking level that occurs because the Ford system continuously adjusts the signal power level to try to obtain a reference power level. It is submitted that the rejection should be withdrawn for this reason

Ford is about keeping the optical system from oscillating uncontrollably when the system is reconfigured. To do this the amplifiers are adjusted one at a time and all amplifiers downstream of the amplifier being adjusted are disabled from reference power level tracking.

In particular, Ford discloses a node that receives an optical signal. The optical signal contains numerous components. Signal 411 in figure 4 is a component of the optical signal. This component acts as a control signal. A node switches this control signal component on and off using digital switch 422. When a node switches control signal component 411 off, all downstream nodes are unable to adjust their output power (see col. 6, ll. 31-47).

The optical signal has other components in addition to the control signal component and Ford discloses assigning variable attenuators to these other components (see part 402 in figure 4). Ford also appears to disclose adjusting the **power** of these other components individually.

The present claimed system includes variable attenuators assigned to each component of an optical signal. Further, when a component is disconnected, the system sets the attenuation amount of the variable attenuator assigned to the disconnected component to a predetermined value. The examiner asserts that Ford teaches this feature in column 4, lines 20-31 and column 2, lines 29-35.

Column 4, lines 20-31 of Ford, teaches that channels get added and dropped. However, this section does not to explain what occurs when a channel is dropped.

Column 2, lines 29-35 of Ford explains the purpose of the control signal component. This section explains that when the control signal component is absent, the apparatus maintains the level of the output signal. However, when the control signal component is enabled, the apparatus is allowed to adjust the output signal to a predetermined level. This section only discusses adjusting the power of the entire output signal. The section does not teach adjusting the power of each individual component making up the output signal. Further, this section does not teach setting attenuation for component to a predetermined value when the component gets disconnected, like in the present invention.

In Ford it seems that the disconnection of the control signal component causes the apparatus to discontinue adjusting the power. However, the disconnection of the control signal component does not result in an attenuator assigned to the control signal component being set to a predetermined attenuation amount value. It seems that the only time the system sets the attenuator assigned to the control signal in Ford is when the unit adjusts the powers of the other signal components.

Ford seems to discuss that the other components are assigned attenuators and the other components can be dropped. Ford also discusses adjusting the attenuator when the

component's power level deviates from a reference level so that the reference power level can be tracked (see col. 6, l. 64 through col. 7, l. 4). However, Ford does not teach setting the attenuator to a predetermined attenuator amount value when the drop occurs. Instead, based on column 7, lines 1-4, it appears that if a component is dropped, the controller will attempt to adjust the power of the dropped component to a reference level. That is, Ford adjusts the signal to a reference level while the invention adjusts the attenuator amount to a predetermined level, two different operations with different effects.

For the above-discussed additional reasons, it is requested that the rejection be withdrawn.

It is submitted that the invention of independent claims distinguishes over the prior art and withdrawal of the rejection is requested.

The dependent claims depend from the above-discussed independent claims and are patentable over the prior art for the reasons discussed above. The dependent claims also recite additional features not taught or suggested by the prior art. For example, claim 5 calls for maximizing the **attenuation amount** of a variable attenuator assigned to an optical signal component of an unused wavelength. It is submitted that the dependent claims are independently patentable over the prior art.

If there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.


Respectfully submitted,

STAAS & HALSEY LLP

Date: _____

1/20/16

By: _____


J. Randall Beckers
Registration No. 30,358

1201 New York Ave, N.W., Suite 700
Washington, D.C. 20005
Telephone: (202) 434-1500
Facsimile: (202) 434-1501